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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,486	01/07/2002	Sally Pucilowski	SGT-44	3568

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EXAMINER	
BOLDEN, ELIZABETH A	
ART UNIT	PAPER NUMBER
1755	

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/036,486	PUCILOWSKI ET AL.	
	Examiner	Art Unit	
	Elizabeth A. Bolden	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) *13-28* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☒ Claim(s) *2-4,6-8 and 10-12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-12, drawn to a glass composition, classified in class 501, subclass 64.

II. Claims 19-22, drawn to a glass making method, classified in class 65, subclass 404.

III. Claims 13-18 and 23-25, drawn to an optical component, classified in class 356, subclass 239.2.

IV. Claims 26-28, drawn to a demultiplexing method, classified in class 369, subclass 47.2.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the glass composition can be made by a materially different method such as forming a perform prior to molding the glass.

Inventions I and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a glass lens and the inventions are deemed patentably distinct

since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions I and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the glass can be used for a materially different process such as using the glass as an ophthalmic lens.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions an interference filter and a method of making a glass are not related since the interference filter is not formed by melting and molding.

Inventions II and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions, the methods of demutliplexing and forming a glass are not related since the melting of a glass does not include demultiplexing a optical signal

Inventions III and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the interference filter can be used for a material different process such as removing signal noise.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Harry Shubin on 24 April 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-28 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional applications upon which priority is claimed fail to provide adequate support under 35 U.S.C. 112 for all the claims. The table below shows which claims receive what priority date over the two provisional applications.

Instant Claims	Provisional Application No.	Priority Date
1-4	60/259,706	01/05/2001
5-8	60/317,493	09/07/2001
9-12	None	01/07/2002

Claim Objections

Claims 2-4, 6-8, and 10-12 are objected to because of the following informalities: Missing Punctuation.

Claims 2-4, 6-8, and 10-12 do not end in a period.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-12 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Yoshii et al., U.S. 6,476,975.

Yoshii et al. disclose a lithium sodium silicate glass having overlapping ranges of components with instant claims 1, 3, 5, 7, 9, and 11. See column 2, lines 3-19. The compositional ranges disclosed by the reference are sufficiently specific to anticipate the compositional limitations in claims 1, 3, 5, 7, 9, and 11. See MPEP 2131.03. Furthermore, Yoshii et al. discloses Examples 3, 5, 9, and 18-20, which meet all the compositional limitations of claim1 and the refractive index limitation of claim 2. Examples 5, 9, and 18-20, also meet all the compositional limitations of claim 5 and the refractive index limitation of claim 6 and Examples 9 and 19, also meet all the compositional limitations of claim 3 and the refractive index limitation of claim 4,

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Yoshii et al. would inherently possess the same n_d, T %, CTE, E, and T_g as recited in claims 2, 4, 6, 8, 10, and 12. See MPEP 2112.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nakashima et al., Japanese Patent 2000-357318 A.

This rejection is over the Japanese Patent because this reference qualifies as prior art under 35 U.S.C. 102(b). However, for convenience, the column and line numbers of the English language equivalent US Patent No. 6,387,510 will be cited below.

Nakashima et al. disclose a lithium alumino-silicate glass having overlapping ranges of components with instant claims 1, 3, and 5. See abstract of Nakashima et al. The compositional ranges disclosed by the reference are sufficiently specific to anticipate the compositional limitations in claims 1, 3, and 5. See MPEP 2131.03. Furthermore, Nakashima et al. discloses Examples 1-4, 7, 10-12, 14-18, 20, and 41, which meet all the compositional limitations of claim1 and the T_g and Young's modulus limitations of claim 2.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Nakashima et al. would inherently possess the same n_d, T %, CTE, E, and T_g as recited in claims 2, 4, and 6. See MPEP 2112.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Maeda et al., U.S. Patent 6,268,304.

Maeda et al. disclose a plate glass having overlapping ranges of components with instant claims 1, 3, and 5. See abstract of Maeda et al. and column 6, line 58 to column 7, line7. Maeda et al. disclose a range for the coefficient of thermal expansion for the glass, which overlaps the limitation of claims 2, 4, and 6. See column 6, lines 14-20. The compositional ranges and the coefficient of thermal expansion disclosed by the reference are sufficiently specific to anticipate the compositional limitations and thermal expansion limitations in claims 1-6. See MPEP 2131.03.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Maeda et al. would inherently possess the same n_d, T %, E, and T_g as recited in claims 2, 4, and 6. See MPEP 2112.

Claims 9-12 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Yoshii et al., U.S. Patent Application Publication 2002/0065186 A1.

Yoshii et al. disclose a mother glass having overlapping ranges of components with instant claims 9 and 11. See abstract of Yoshii et al. The compositional ranges disclosed by the reference are sufficiently specific to anticipate the compositional limitations in claims 9 and 11. See MPEP 2131.03.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Yoshii et al. would inherently possess the same n_d, T %, CTE, E, and T_g as recited in claims 10 and 12. See MPEP 2112.

Claims 5 and 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Mennemann et al., U.S. 4,562,161.

Mennemann et al. disclose an optical glass. See abstract of Mennemann et al. Moreover, Mennemann et al. discloses Examples 13, 15, and 16, which are given in wt % but when, converted to mol % meet all the compositional limitations of claim 5 and the refractive index limitation of claim 6.

	Example 13		Example 14		Example 15	
	Wt %	Mol %	Wt %	Mol %	Wt %	Mol %
SiO_2	56.64	56.57	52.5	55.4	57	57
B_2O_3	8	6.9	5.9	5.4	7.5	6.5
P_2O_5			0.7	0.3		
Al_2O_3	1.22	0.72	2.0	1.2	1.8	1.1

Li_2O	8.01	16.02	7.7	16.3	8.0	16.0
Na_2O	5.38	5.21	6.0	6.1	5.1	4.9
K_2O	5.08	3.25	5.6	3.8	6.3	4.0
MgO	1.1	1.65	0.8	1.3	0.9	1.4
CaO	1.9	2.03	0.6	0.7	0.5	0.5
ZnO			0.1	0.1	1.6	1.2
PbO			1.5	0.4		
ZrO_2	2.01	0.99	2.0	1.0	1.0	0.5
TiO_2	8.10	6.08	8.0	6.3	8.5	6.4
La_2O_3	0.77	0.14				
Y_2O_3	0.87	0.23	2.5	0.7	0.5	0.1
Ta_2O_5			0.5	0.1		
Nb_2O_5	0.92	0.21	0.8	0.2	0.6	0.1
WO_3			2.8	0.8	0.8	0.2

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Mennemann et al. would inherently possess the same T %, CTE, E, and T_g as recited in claim 6. See MPEP 2112.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mennemann et al., U.S. Patent 4,562,161.

Mennemann et al. teach an optical silicate glass. See abstract of Mennemann et al. Mennemann et al. teach Examples 13, 15, and 16, which anticipate claims 5 and 6. See above rejection.

Mennemann et al. differs from the instant claims by not teaching the glass compositional ranges in terms of mol percent.

It appears that the compositional ranges of Mennemann et al. if converted from wt % to mol % would overlap the compositional ranges of instant claims 1-4 and 7-12 since examples 13, 15, and 16 anticipate the compositional limitations of instant claims 5 and 6. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124. The examiner can normally be reached on 8:30am to 6:00 pm with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

DAVID SAMPLE
PRIMARY EXAMINER

EAB
May 5, 2003